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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,466

03/31/2004

Tian Wang

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KLARQUIST SPARKMAN LLP
121 S.W. SALMON STREET
SUITE 1600
PORTLAND, OR 97204

EXAMINER

OPSASNICK, MICHAEL N

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/816,466	Applicant(s) WANG ET AL.	
	Examiner MICHAEL N. OPSASNICK	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/2/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-48 is/are allowed.
- 6) ☒ Claim(s) 1-27, 49-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 28-48 are allowed over the prior art of record.
2. The following is a statement of reasons for the indication of allowable subject matter: As per the independent claims in claims 28-48, the claim recitations pertaining to the relationship between forward error correcting parameters and the limited parameters in the intraframe are not explicitly taught by the prior art of record.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-16,23-27 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: what is the relationship between type signal information (i.e. how does it relate to) predictive frames and intra-frames. The claim elements do not show a structural relationship between "type signaling information", and how this

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information is used, other than, that the information itself somehow "differentiates" between predicted and intra frames.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-27,49-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Shoham (5699485).

As per claims 1,2, Shoham (5699485) teaches an audio processing tool processing a plurality of frames, including long term prediction and not long term prediction (as frame processing and short term and long term predictive parameters – col. 11 lines 15-35).

As per claim 3, Shoham (5699485) teaches differing frame/sample rate (col. 13)

As per claim 4, Shoham (5699485) teaches real time decoder using lp (col. 28 lines 15-25)

As per claim 5, Shoham (5699485) teaches short term lp (col. 11 lines 15-35)

As per claim 6, Shoham (5699485) teaches excitation codebook (col. 10 lines 48-58).

As per claim 7,9, Shoham (5699485) teaches predicted subframes alone (col. 11 lines 19-25).

As per claim 8,11,12, Shoham (5699485) also teaches intra frames (interpolation – col. 33 lines 5-50).

As per claim 10, Shoham (5699485) teaches voiced frames (col. 6 lines 1-14)

As per claim 13, Shoham (5699485) teaches LSP (col. 11 lines 15-35)

As per claim 14, Shoham (5699485) teaches frame level (as prctv energy – col. 5 lines 1-38)

As per claims 15,16, Shoham (5699485) teaches packets and computer executable instructions (col. 4 lines 40-48).

Claims 17-27 are encoder/decoder claims that are similar in scope and content to the claimed audio processing tool claims of claims 1-16; as such, claims 17-27 are rejected under similar rationale as presented against claims 1-16 noted above.

As per claims 28-48, Shoham (5699485) teaches the common elements of claims 1-27 that are listed in claim 28-48. Furthermore, as per claims 28-48, Shoham (5699485) teaches frame erasure processing (col. 6 lines 14-44; col. 32 lines 30-65).

As per claim 49-70, Shoham (5699485) teaches the common elements of claims 1-27 that are listed in claims 49-70. Therefore, claims 49-70 are rejected under similar rationale to claims 1-48 as noted above. Furthermore, as per claims 49-70, Shoham (5699485) teaches an encoder using liner prediction parameters (as noted above) based on the type of signal (col. 3 lines 29-60, col. 9 lines 40-60; col. 33 lines 35-55).

Response to Arguments

7. Applicant's arguments filed January 2, 2008 have been fully considered but they are not persuasive. As per applicants arguments against the Shoham reference with respect to the type of parameters in intra frames, examiner respectfully disagrees and argues that 1) applicant is arguing the specification and not necessarily the current claim scope -- the current claim scope pertaining to these features is of non-functional descriptive language. As such, although the intraframes may be different than Shoham, the current claim scope does not afford such a narrow interpretation as suggested by applicant. Examiner notes, however, that moderate claim amendments 1) detailing the structure of the intra-frame, and 2) overcoming the 35 USC 112 rejection above, would overcome the Shoham reference. With respect to applicants arguments against the Shoham reference not concerned with speech quality and improvement, examiner disagrees and points to Shoham (col. 1 lines 46-67; col. 2 lines 55-67) detailing the concern in the art over lack of parameters during frame erasure loss, and how to provide adequate information (such as codebook gains and scalefactors) to overcome information loss during frame erasure.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richemond Dorvil, can be reached at (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael N. Opsasnick/
Primary Examiner, Art Unit 2626
3/29/08